



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE IDEAL ORGANIZATION OF A SYSTEM OF SECONDARY SCHOOLS TO PROVIDE VOCATIONAL TRAINING¹

HARLOW S. PERSON

The Amos Tuck School of Administration and Finance, Dartmouth College

Understanding that my function in opening this consideration of one of the fundamental problems of vocational education is to inspire and focus discussion, I shall take the liberty of pursuing methods most conducive to that end: I shall present and explain a theory of organization for vocational schools in its boldest outlines only, and by statements more or less free from qualification.

The literature of this problem discloses to us that the schemes of organization for a system of vocational education fall into two classes: that class, on the one hand, whose fundamental idea is the introduction of vocational courses into the existing high-school curriculum, and that class, on the other hand, whose fundamental idea is that vocational training should be a continuation, finishing training presented by schools organized separately from the existing high schools. The great majority of schemes fall into the first class and very few of them into the second, for the greater part of the literature I have in mind presents the discussions of educators and nearly every educator recommends a scheme of organization belonging to the first class. If we turn to that small part of the literature presenting the views of business men, we find that the discussions of business men show that the majority of them commend schemes of organization which fall into the second class. This is an interesting alignment, educators on the whole favoring schemes of the first class and business men on the whole favoring schemes of the second class. The difference is probably due to a difference in points of view, an aspect of the subject to which I shall return.

The general scheme which I favor, and which I intend to present this afternoon, is of the second class. While the subject set for our discussion confines our attention to the organization of secondary

¹ Read at the Annual Meeting of the New England Association of Colleges and Preparatory Schools, October, 1908.

schools for vocational training, the principles involved apply to all schools for vocational training, higher as well as secondary. I am, in fact, presenting what is known as the Tuck School Theory, a theory already applied to higher commercial education and one, I believe, applicable to secondary industrial and commercial education.

The ideal system of secondary schools for vocational training should consist of schools organized separately from the secondary schools of the general educational system, which would receive students no longer able to continue their general training and which should provide them a brief, distinctly practical course of training, the object of which should be technical efficiency.

The significant fact in this ideal system is that it accepts the existing system of general education as the basis of its vocational training and builds upon it, but does not attempt to build into it, courses of vocational training. It recognizes the value, more than that, the necessity, of as thorough a general training as possible as a factor in preparation for vocational activity. Furthermore, it places a higher value on general education as an element in vocational training than does the scheme which would provide vocational training by injecting vocational courses into the present high-school curriculum, in that it demands that the existing high-school curriculum remain unchanged (except for changes which may result without any reference to vocational training) and unimpaired by any modification of its aim, and that vocational training be offered by separately organized, specialized, intensely practical institutions.

In another way this ideal organization has the interest of general education more at heart than does that scheme which would provide vocational training by introducing vocational courses into the existing high-school curriculum: it places the emphasis on the general rather than on the vocational training. This may seem paradoxical, but what I mean is this: should we introduce vocational courses into the high-school curriculum, the influence would be to emphasize those courses as against the other, so-called cultural, high-school courses; the tendency would be to induce students who might pursue farther a general training to abandon the pursuit of general training and take up prematurely vocational training. The emphasis should be just the opposite: the system for vocational training should strive to induce students to keep out of it and to continue the general training for as long a period as possible; then, when students have pursued the general training for as long a period as possible, it should welcome

them, with a view to providing them, in a short course, its strictly vocational training.

It may seem inconsistent to recommend the existing system of general education as the basis of a system of vocational training, in view of the fact that the movement for vocational training receives a large part of its impulse from a belief that the secondary education of today is wholly inadequate to train for life. The inconsistency is apparent only, and the apparent inconsistency is removed if we put it in this way: a nation's system of education should have two aims: to develop in each individual on the one hand manhood or womanhood, and on the other hand vocational efficiency. That part of the educational system whose aim is to develop vocational efficiency should receive the youth after the other part of the system has developed in him more perfect manhood or womanhood. If that part of the system whose aim is to develop the man is inefficient for its purpose, it should be reconstructed; that is a distinct educational problem; if that part of the system whose aim is to develop vocational efficiency is inadequate, it should be reconstructed; that is another distinct educational problem. It is not inconsistent for the advocates of a separately organized system of vocational training to build upon a system of general training which is confessedly inadequate; it simply bespeaks their recognition of the fact that that part of the system whose aim is to effect discipline and culture is in process of improvement, and it bespeaks their optimism regarding that improvement.

This recognition of two distinct problems is important, for it explains away another apparent inconsistency: that those who insist that the only really efficient vocational training is the specialized, practical training of separately organized schools, approve, nevertheless, the introduction of manual training and of such courses as commercial geography into secondary schools. The introduction of these courses is not a solving of the problem of vocational training; it is the solving of the problem of making our general system of secondary training broader and richer. Indirectly it aids in the solution of the problem of vocational training in that it improves the foundation for vocational training: directly, however, it is a part of the solution of the other problem, that of making the general secondary training more efficient in developing the capacity for livelihood, by developing many-sided and adaptable individuals. The introduction of new courses into the secondary-school curriculum for the sake of

broadening and enriching that curriculum is not the establishment of a school for vocational training, even though the courses, some of them, be courses that obviously have their place in a scheme for vocational training. The difference between the vocational and the existing secondary school does not consist in a mutual exclusiveness as to the subject-matter taught. In what, then, does it consist?

The difference is a difference in point of view, a difference in motives, in the objects to be accomplished, and in the methods of accomplishing the different objects. This brings us back to a suggestion I have already made, that the reason educators, on the one hand, favor one form of organization for vocational schools, and business men, on the other hand, favor another form of organization, is, that there is a difference between the points of view of the two groups.

The point of view of the teacher, because of his training, his professional inheritance, and especially his contact with young and plastic pupils, is that the function of the school is to develop the many sides of the child. He may be a teacher of English or Greek or history, and of course his immediate desire is to teach the pupil English or Greek or history, but behind and above this immediate desire is the recognition of the fact that he is but one of a number of forces working together to develop, through various instrumentalities, all sides of the pupil intellectually and aesthetically, and—witness the movement for manual training, commercial geography, and so on—to develop the child in adaptability to the practical things of life. His aim is the promotion of “culture,” which is in one sense adaptability. The teacher’s interest has to be, of course, in the field he is teaching, he must perfect himself in that field, but he has as well an interest in a broader field, that of pedagogy, and this interest is not the lesser one. The nature of the child’s mind, the nature of its growth, the differences between individuals, the different ways in which they should be handled pedagogically, these are the primary interests of the teacher of elementary and secondary schools. It is not the development of a special efficiency at which he aims, but of an all-round efficiency which is the foundation for the later development of a special efficiency. A well-developed body, a good digestion, and rich, red blood to feed the brain; a love of nature and a knowledge of things about us; a knowledge of good literature, a love for it and the consequent ability to speak and write purely and effectively; a knowledge of individual and social achievements, of their motives and their consequences; the ability to distinguish the relative values

of things; the appreciation of beauty and the ability to make and do beautiful things; these are the results for which a general system of education should strive, through physical culture, manual training, and the teaching of English, Greek, Latin, history, botany, and other subjects. The aim should not be to teach vocational skill except in the respect that increased general power contributes to vocational skill.

The aim of the teacher, then, is the general development of the pupil. But he is conscious of the criticism of the industrial world that our youth is not industrially efficient; that this general efficiency which our educational system develops does not make itself effective by application through some definite vocational channel. The secondary school, stirred by this criticism, attempts to assume a new function, that of vocational training. The demands of the industrial world must be met, but the teacher does not wish the individual to lose the benefit of cultural training. He recognizes that there is a demand, on the part of some business men, for practical vocational schools whose organization does not presuppose or involve cultural training. So he recommends the addition of vocational subjects to the high-school curriculum; he offers to effect both the general training and the vocational training through the same curriculum.

In so doing the secondary school endangers its own efficiency in its great work, the all-round development of the youth. The moment it attempts to train for livelihood in a particular vocation it weakens its power to train for life. The vocational course which it would introduce, that it may not be a weak, flabby, inefficient thing, must be strong enough to destroy the spirit of the general training. The secondary schools of today should say to the business world: "You criticize the education of youth as vocationally inefficient; we recognize that the criticism is just; our mission, however, is merely to provide the foundation for vocational training; it is your duty to provide institutions for that training; if you do so we will send to those institutions physically and intellectually strong and adaptable youths: do not ask us to assume two aims the spirit of which are mutually destructive: we have problems enough in perfecting our schools that they may train for life without reference to particular vocations."

Instead of saying this, our secondary schools attempt to meet the criticism of vocational inefficiency by assuming the new burden. I believe it to be an error on their part.

But, as I said, although the secondary schools seem ready enough to assume the new burden, business men are not so ready to accept that solution of their problem of vocational inefficiency. They represent the group in favor of separately organized, practical, distinctly vocational schools. The reason is that their point of view, because of their experience with youths and especially because of their demands upon them, is different from that of the educator. Their point of view may be summed up in the words—vocational efficiency.

This vocational efficiency of the business man demands of each individual youth entering his service two things particularly: first, a general keenness, and second, a technical skill in the vocation, a skill not only in the performance of manual operations but also in the performance of mental operations involved—physical agility in doing requisite things and also mental agility in knowing what things to do and when to do them. It is the lack of this second element in vocational efficiency, technical skill, which the business man deplures. So keenly does he feel this lack that he often fails to recognize the value of secondary education as a means of developing the first element and often goes to the extreme of condemning the whole educational system. Therefore the tendency on his part is to favor a system of vocational training extreme in its departure from the existing system of education: he at times feels tempted to leave the existing system to the student preparing for college, and would establish alongside it another system, wholly independent, composed exclusively of vocational courses. Just as the educator, on the one hand, would construct an instrument for vocational training ineffective on its technical side, by introducing a few technical courses into his secondary curriculum, so, on the other hand, some business men, bitter in their experience with grammar-school and high-school graduates, would go to the other extreme, and establish a system of purely technical schools, entirely separate from the general system, receiving students at the earliest age and depriving them of all the cultural benefits of the general training. One extreme is as deplorable as the other. The ideal system of vocational education should meet the demands of both the educator and the business man without going to the extreme suggested by either. Because training which has as its aim discipline and culture should not be joined with training which has as its aim vocational skill, the ideal system of vocational education should utilize the general educational system for the development of disciplined and well-informed raw material, and

should develop vocational skill by a short course of distinctly technical training in specialized professional schools.

The ideal system which I have in mind would operate as follows : By a system of free, compulsory education the state would make it possible for all youths to pursue the general training, whose object is discipline and information, for as long a period as possible, and furthermore, would compel them to do so. But, recognizing that at all stages of the educational system individuals are compelled by circumstances to withdraw and take up life's work, the state, to promote vocational efficiency, should provide, at each stage of withdrawal, specialized vocational schools, whose aim should be a direct, and, in a liberal sense, practical technical training. These specialized schools should be ruled by the spirit, motives, and discipline of the business world ; the student, upon entering them, should have left the spirit, motives, and discipline of the general educational system.

In such an ideal system the general educational system would not be impaired by having to carry the burden of training for vocations, and the system of training for vocations would not be weakened by having to carry the burden of training for culture. The greatest industrial efficiency would result. Twelve years of general training, with three of specialized vocational training added, amounts to more, from all points of view, than fifteen years of general training, three-fifteenths of which represents vocational courses scattered through the whole.

On one occasion, after I had outlined such a system of general and vocational training, it was objected that such a system would fail because the state would not know how properly to assign an individual to a course of training for a vocation to which he would be best adapted. I have never been able to see the force of the objection, or even its pertinence. The assignment of an individual to a particular course of vocational training is not necessary in the system suggested, any more than it is now necessary for the state to assign an individual to a classical or scientific course. Such choice should be left to the individual. The state should content itself with offering the opportunity for vocational training.

We have been considering in its larger aspects the relations between the schools for vocational training and the schools of the general educational system. I wish to consider for a time the matter of separate organization of vocational schools, with special reference

to the influence such organization would have upon the efficiency of the vocational training.

The separate organization of the ideal vocational school would consist in at least an administration, faculty, buildings, and equipment separate from those of the general system; as well as separate instruction in identical subjects and especially separate external relationships. In this ideal system the separate organization is complete. I believe that every element of separateness contributes its share toward making for vocational efficiency, either by the creation of a group *esprit* or by making more effective the teaching of strictly vocational subjects.

A word about the importance of group *esprit*. Vocational, or professional, training consists essentially, in some of its aspects, of the creation of a group spirit. What is the meaning of vocation? "The calling or designation to a particular activity," says the dictionary. Society, as a result of its experience, has come to recognize that especial proficiency in any particular activity involves a love for the activity (one must be seized by one's work as by a passion), and that the love for the activity may be in some cases created and in all cases promoted by group association, by artificial situations presenting separateness and exclusiveness. Soldier and Jesuit are historically efficient men: in training them society has taken advantage of the strength that comes from the development of a group spirit. As one may have a call to be a missionary or a minister, as one may have a call to be a doctor or a social-settlement worker, so a youth may have a call to be a mason or a joiner or a textile worker or an office clerk. And he should have a similar pride in his calling; and society, by all instruments at its command, should strive to develop that pride. The exclusiveness of distinct organization, of distinct ideals, of distinct privileges and distinct obligations tends to develop that pride.

The giving of individuality to vocational schools by separateness of organization, tends to develop efficiency in the student in other ways than by the influence of the idea of separateness on the mind of the student.

In the first place, the separate building and separate equipment make possible not only the adaptation of the building and equipment to the particular methods of instruction most desirable for the development of vocational efficiency, but it makes possible also the creation of an atmosphere industrial rather than academic in its

nature. The building should provide for a comprehensive commercial museum, containing not only specimens of raw material and finished products, models of machines, and illustrations of industrial processes, but also specimens of office equipment, blanks, forms, and devices. The museum should be a live thing, creating an atmosphere of business in the building. It should resemble a trade or business man's fair. The walls of the building should be hung with maps, charts, and illustrations pertaining to industrial matters. The building and equipment should be such as to create a peculiar atmosphere; the student or visitor in entering should not be made to feel that he has entered a school at all.

In the second place, the spirit resulting from a separate organization makes possible a distinct discipline. The attitude of the average student in the secondary school, and in the college, is that of the perfunctory meeting of requirements: the attitude that the business man wants is that of a willingness to give more than the letter of the contract demands. It is true that many young men take up business service with the spirit of the perfunctory performances of services only—that is one of the characteristics of the product of secondary education that makes the business man impatient. One of the objects of vocational schools should be the destruction of this spirit; the destruction of this spirit may be accomplished by the discipline of the vocational school; the discipline of the vocational school can accomplish it, not by main force, but only by unobtrusively taking advantage of the *esprit* to which I have called attention.

In the third place, the separate organization makes possible a corps of instructors possessing two very important characteristics—a special knowledge of the vocational subjects taught and a group spirit similar to that which it is desirable to develop in the student body. The teachers in the vocational schools are not to be trained in the ordinary way; they must be the product of our general system of education, and the more extended and thorough the training by that system, the better; but they must have in addition a special training in the particular subjects they are to teach, the training of experience in the business world. The training of the general educational system is necessary to give them great knowledge and great power; the training of business experience is necessary to give them the divine fire.

In the fourth place, the separate organization makes possible a brief, compact course of purely vocational subjects. I think this of

great importance, in a school whose aim is not to develop the many-sided man, but to develop to a high degree of efficiency a particular side of a man. There is hardly an instructor in any school, for instance, who would not agree to turn out more efficient students in a particular field, were he allowed to concentrate fifty-four recitations in nine weeks instead of scattering them through eighteen weeks. From the point of view of the individual's training as a whole this might not be desirable; from the point of view of turning out a good scholar in a particular subject it is desirable. And that is just the difference between general education and vocational training; one aims to develop a general power; the other to develop a particular power.

In the fifth place, the separate organization would make possible external relations on the part of the vocational schools not possible or desirable for schools of the general educational system. I have in mind definite relations with employer on the one hand and with labor on the other.

Those of us interested in this matter of vocational training have heard a great deal about the disappearance of the apprenticeship system; that is one of the chief reasons advanced for the establishment of schools for vocational training. The apprenticeship system, as we know it historically, has disappeared; it was inevitable that that apprenticeship system should disappear with the evolution of modern industrial society. But there has come to me of late an idea which has become a conviction, that there exists in the present situation the possibility of a new apprenticeship system; that there may arise a new apprenticeship system which will take the form of a definite relation between vocational schools on the one hand and employers and labor on the other. This is too large a subject for consideration here, and I can offer only a few suggestions.

It has been my experience, as a mediator between Tuck School graduates seeking positions and business firms, that business firms recognize the value of special vocational training, but that they also recognize that there is somewhat of an adjustment necessary between the graduate of a vocational school and business life. This adjustment takes the form of a brief term of service, at low salary, with the firm accepting the applicant. Two aspects of this term of service are important—one is that it is necessary at all, the other is that it is shorter for Tuck School graduates than for the average college graduates. Now this is a form of apprenticeship; in corresponding

with business firms the term apprenticeship is frequently used by them as best describing the service. A part of the results of apprenticeship is secured by the vocational training, as indicated by the fact that the apprenticeship period with the firm is shortened; the other part is secured by actual service with the firm.

There is no reason why the same understanding which is arising between the Tuck School and business firms may not arise, and take a definite form of organization, between vocational schools in general and the business world. An engineering school sends its men out for service in the field; forestry schools send their men out for service in the woods; the trade schools established by Professor Hanus' commission, many of them, provide for students who at the same time work in shops. This apprenticeship seems to be a necessary part of vocational training. And it exists in most effective form in connection with specialized, separately organized schools, because it is between such schools only and the business world that definite apprenticeship relations can be established.

In conclusion I wish to comment upon some of the arguments which are advanced in opposition to this ideal system of separately organized, intensely practical vocational schools.

A first criticism is that separately organized vocational schools, unless they are to have a large proportion of cultural courses, would deprive the youth of the general training, and general training is of more importance than special training. If it is proposed to meet this criticism by putting a large number of cultural courses into the vocational school, why go to the trouble, when the same thing can be accomplished by putting vocational courses into the high school of the established educational system?

The ideal system which has been advocated in this address does not propose to weaken the established high school by putting into it vocational courses, and does not propose to weaken the vocational school by putting into it cultural courses. It meets the criticism by insisting that its students shall have secured a general training in the established schools, for as long a period as possible and as thoroughly as possible, before they shall enter the specialized vocational school.

A second criticism of the separately organized vocational school is that it ostracizes its students, and the manner in which classical-course students in high schools look down upon commercial-course students is cited as evidence. This argument against separately organized vocational schools is exasperating, for the very attitude

toward students of commercial courses cited in evidence is the result of a consciousness of the fact that the commercial course, organized by introducing practical courses into the high school, is a commercial course in name only and is usually in fact an attractive, easy course for mentally inferior or lazy students. Given the separately organized vocational school, with its business-trained and business-like corps of instructors, and with instructors and students voluntarily submitting to a driving discipline made possible by the interest of all concerned, demanding of the general educational system well-trained raw material, and maintaining a high standard of excellence; given such a vocational school, might not the sense of inferiority be with the other group of students?

Another criticism is, that some of the subjects that would be taught in the intensely practical curriculum of a vocational school are identical with subjects taught in the established high school—English composition, for instance—and to duplicate these courses would involve a wasteful expenditure.

The weakness of this criticism is, that really there is no duplication. The criterion of duplication is found in the aims of the courses to be compared and in the methods of conducting them, not in their titles. A course in English composition, the purpose of which is to teach prospective workers how to write business letters and make intelligible reports, should be quite different from the conventional course in English composition. I have known students to make good records in English composition and still be unable to write a business letter, correct in content, form, grammar, and spelling. In fact, this matter of writing good letters and good reports is so important in business affairs, that a vocational school is justified in meeting any possible necessary expense in training its students to write correctly such documents as are peculiar to vocational activity.

The fourth criticism of the system of separately organized vocational schools which has come to my attention is, that the establishment of such a system would be too expensive; that it would be more economical to go only to the additional expense of introducing necessary vocational courses into the established high-school curriculum. Too expensive! Have not schoolmasters learned one of the cardinal principles of modern business management, that expense is a relative thing, and is to be measured in terms of the return for the expenditure? Accepting this conception of the meaning of expensive, to assert that a system of separately organized schools is too ex-

pensive is to beg the question, for it throws us back on to the main proposition. What are the relative returns in vocational efficiency of the two systems of organization? The fact that the business man, who is a keen judge of returns for capital expenditure, seems to favor, so far as business publications indicate, the separately organized school, is a sufficient reply to this criticism.

The reason, I imagine, why the superintendent of schools is inclined to offer this criticism is, that he looks at it from the narrow point of view of local conditions, rather than from the point of view of national conditions. "If there are to be commercial schools, we must have one," he says to himself with a laudable feeling of friendly rivalry. He canvasses the situation and finds that his community cannot afford a separately organized school. He is in error in failing to realize there need not be a vocational school side by side with every high school of our educational system. Specialized training involves a smaller number of individuals than general training. It would take a number of grammar schools to fill one vocational high school. As the area of jurisdiction of the state is to the area of jurisdiction of the county, so should be the area of service of the vocational high school to the area of service of the grammar school.

Finally, a criticism least worthy of attention, but most symptomatic of the American state of mind, is expressed in the following words: "The need for vocational training is not so pressing but that the modified high school is a sufficient departure for the present." O American Complacency! Is any system of vocational schools worthy the efforts of organization, that is not, in the light which is bestowed upon us, the most efficient that can be devised?